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Fig. 1. Doris sublævis.

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- Fig. 7. Goniodoris elongata.
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XII.—On some New and Rare British Mollusca. By Edward Forbes, M.W.S., For. Sec. B.S., &c.

[With a Plate.]

I. Doris Argo. Dr. Johnston pointed out some time ago that the *Doris Argo* of Pennant and British authors generally

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The original Doris Argo is represented in Bohadsch, "De quibusdam Animalibus Marinis," tab. v. figs. 4 and 5. The animal there figured was 3 inches and 5 lines long, but the accompanying description well agrees with my specimens. In the figure it seems smooth, and as such it has generally been described, but from their minuteness the papillæ might have easily been overlooked. Bohadsch's description of the colour of its back, "In parte prona seu dorso colore coccineo splendet" (p. 66), is most appropriate. The origin of the name "Argo" as applied to this species is singular. Bohadsch, observing the summits of the tentacula to be speckled with minute black specks, fancied them to be eyes, and accordingly bestowed on his animal the name of Argo or Argus, as he said he could easily count a hundred or more of these eyes. This speckled appearance is seen on the tentacula of many Nudibranchia, and is merely a variation in the colouring of the animal.

II. Doris Maura. Nov. Sp. Forbes. Plate II. fig. 17. D. elongata, dorso nigro cæruleo-maculato, tuberculis carneis

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obtecto, tentaculis carneis basi tuberculatis, branchiis albis, pede albo. Lon.  $1\frac{1}{4}$  unc.

This beautiful addition to our Fauna was found in July last under a stone at low water at Devar Island, near Campbeltown, Argyleshire. In form it is more elongated than any other British species of its division. Its colouring is most remarkable: the ground colour of the mantle is jet black, dotted here and there with little round spots of the brightest cobalt blue, and covered at regular distances by ovate pink tubercles, which are larger around the roots of the large white plume-like branchia (six in number), and also around the bases of the tentacula. The tentacula are singular, on account of being planted as it were on the summit of a tubercled pedicle, in shape resembling the stalk of a clove. This pedicle is pink, the tentacula darker, rather inclined to brownish; some of the tubercles, especially those near the anus, are lobed. The foot is pinkish white, its anterior margins not produced into tentacula. The creature is rather sluggish in its motions, but noble in its aspect: its ornate mantle, its sceptre-like tentacula, and plume of snowy branchiæ like ostrich feathers, dignifying it much above its British brethren.

# III. Nov. GEN. GONIODORIS. Forbes.

Body prismatic: mantle marginally reflected, abbreviated posteriorly: oral veil forming two sustentacula: posterior extremity acute, caudiform: branchiæ dorsal, unprotected.

Having to describe a new prismatic Doris, I avail myself of this opportunity to characterize the above genus; the establishment of which I consider absolutely necessary for the following reasons. The dorso-branchiated Nudibranchia form a most natural family, consisting of the genera Doris, Goniodoris, Polycera, (Thecacera?), and Euplocamus, which last genus conducts us to the next family, the Tritoniaceæ. On reviewing their characters, we find their generic distinctions to depend, 1st, on the form of the body; 2nd, on the form of the mantle; 3rd, on the sustentacula; 4th, on the posterior termination; and 5th, on the position and protection of the breathing organs, which also afford

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family characters along with upper-tentacula, the structure of which is laminated throughout the tribe.

GONIODORIS EMARGINATA. Nov. Sp. Forbes.

G. ovata, pallio postice emarginato dorso lævi, sustentaculis ovatis, acutis. Lon.  $2\frac{1}{2}$  lin. (Plate II. fig. 12.)

The body of this species is quadrangularly ovate, the mantle broad, turned up and waved at the margin: posteriorly it is deeply notched. The back is smooth. The branchiæ are six in number; the upper tentacula are rather long, the lower ovate, acute, and largely developed. The back is of a fawn colour, the branchiæ and foot white, the border of the mantle yellow, and there is a yellow stripe on the tail. It was dredged in twenty fathoms water off the coast of Ballaugh, Isle of Man, in October, 1839.

On the same coast also occurs at low water, in considerable abundance, the Doris nodosa of Montagu, another species of this genus. As it seems to have escaped British naturalists for many years, I add a description from my Manx specimens. In form it is quadrangularly oblong: the mantle is broad, turned up and waved at the margin, the back smooth, with a central carina and four equidistant papillæ on each side. The lower or oral tentacula are lanceolate, acute and large; the upper or dorsal laminated. The branchiæ are from 7 to 9 in number, plumose, narrow, arranged in a circle (sometimes interrupted), forming an erect cup. The scallops or wavings of the cloak are generally eight on each side, and the papillæ appear to be mucronate. The colour of the back is white tinged with rose: the foot, tentacula, and branchiæ are white, and there is a yellow stripe on the tail. This stripe is seen in several species of this genus. The Goniodoris nodosa is nearly three-fourths of an inch in length.

The Doris Barvicensis of Dr. Johnston (Annals Nat. Hist. v. i. p. 55., Pl. II. fig. 11-13) is a Goniodoris. In addition to the locality originally given, it was found by Mr. Goodsir and myself during the past summer under stones at low water in Bressay Sound, Shetland. The Doris pallens and Doris gracilis of Rapp (Nov. Acta Acad. Nat. Curios., tom. xiii. 2nd part), also belong to this genus. The sources of

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IV. Montagua viridis. Nov. Sp. Forbes. Plate II. fig. 18.

M. elongata alba, branchiis elongatis viridibus apicibus albis, in seriebus quinque digestis : tentaculis superioribus longioribus. Lon.  $0\frac{1}{8}$  unc.

The body of this very distinct new species is lanceolate, tapering gradually to the finely attenuate tail. On the back there are five transverse rows of long branchiæ, seven or eight in the broadest rows, which are those placed foremost. There appear to be no papillæ on the sides as in the two other British Montaguæ. The head is furnished with four long tentacula, the uppermost ones longest, and have two large black eyes at their bases. These tentacula do not appear to be ciliated: they are rugose, or wrinkled concentrically. In this respect they differ from the tentacula of such Eolida as have their branchiæ arranged in lateral tufts, which have the upper tentacula ringed and covered with vibratile cilia. Such cilia are seen also on the laminated tentacula of Doris: those on the upper tentacula of Goniodoris nodosa are larger than the branchial cilia in that species: the lower or oral tentacula are not so covered. The upper and lower tentacula among most of the Nudibranchia, perhaps in all, are evidently very different organs, the latter for touch, the former for some finer sense.

The body and tentacula of *Montagua viridis* are white, saving a narrow greenish line down the back. The branchiæ are green with white ocellated tips and sometimes a few scattered dark green spots. The green colour is caused by a circulating fluid, the particles of which may be seen rushing from the central vessel or dorsal stripe into the branchiæ, where they remain for a short time, and then flow back.

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IV. Montagua viridis. Nov. Sp. Forbes. Plate II. fig. 18.

M. elongata alba, branchiis elongatis viridibus apicibus albis, in seriebus quinque digestis : tentaculis superioribus longioribus. Lon.  $0\frac{1}{8}$  unc.

The body of this very distinct new species is lanceolate, tapering gradually to the finely attenuate tail. On the back there are five transverse rows of long branchiæ, seven or eight in the broadest rows, which are those placed foremost. There appear to be no papillæ on the sides as in the two other British Montaguæ. The head is furnished with four long tentacula, the uppermost ones longest, and have two large black eyes at their bases. These tentacula do not appear to be ciliated: they are rugose, or wrinkled concentrically. In this respect they differ from the tentacula of such Eolida as have their branchiæ arranged in lateral tufts, which have the upper tentacula ringed and covered with vibratile cilia. Such cilia are seen also on the laminated tentacula of Doris: those on the upper tentacula of Goniodoris nodosa are larger than the branchial cilia in that species: the lower or oral tentacula are not so covered. The upper and lower tentacula among most of the Nudibranchia, perhaps in all, are evidently very different organs, the latter for touch, the former for some finer sense.

The body and tentacula of *Montagua viridis* are white, saving a narrow greenish line down the back. The branchiæ are green with white ocellated tips and sometimes a few scattered dark green spots. The green colour is caused by a circulating fluid, the particles of which may be seen rushing from the central vessel or dorsal stripe into the branchiæ, where they remain for a short time, and then flow back.

This pretty little species was found on a specimen of An-

tennularia indivisa, dredged in deep water off the coast of Ballaugh, Isle of Man, September 30, 1839.

V. RISSOA RUPESTRIS. Nov. Sp. Forbes. Plate II. fig. 13.

R. testd oblongo-turritd, albd, anfractibus 7 planulatis, ultimo basi striato; suturis marginatis; labro simplici. Lon.  $0\frac{2}{10}$  unc.

Shell translucent, white, with seven flat whorls, which are almost smooth; round the summit of each runs a spiral stria, which gives a marginated appearance to the suture. The basal whorl is slightly carinated and spirally striated below the carination; a few obsolete striæ sometimes appear above: the mouth is pear-shaped, and has no rib thickening the outer lip; the pillar lip is broad, and slightly folded back. Animal milk-white.

This Rissoa is found in crevices of rocks at half-tide along with Rissoa cingilla (to which it is nearly allied), Kellia rubra, and Auricula alba, at Kirk Santon Head, Isle of Man.

VI. PLEUROTOMA SMITHII. Nov. Sp. Forbes. Plate II. fig. 14.

P. testá fusiformi-turritá, sub lente tenuissime striatá; anfractibus 8 convexiusculis, costatis, costis 12: aperturá oblongo-lanceolatá, spirá multò breviore, caudá brevi. Lon.  $0\frac{4}{10}$  unc.

This pretty species has the whorls slightly rounded, and ornamented with strong longitudinal ribs, which are not, however, continuous from whorl to whorl. The whorls are slightly angulated at their summits: the sutures are deep. Its colour is yellowish white, with numerous spiral bands of yellowish brown, which give it a very elegant appearance. The mouth is oblong, and the outer lip is thickened by a rib. The canal is short and slightly inclined to the left. I have dedicated it to James Smith, Esq., of Jordanhill, by whom it was dredged in July last in Lamlash Bay, Arran.

VII. PLEUROTOMA COARCTATA. Nov. Sp. Forbes. Plate II. fig. 15.

P. testá anguste fusiformi, striatá, anfractibus 7 convexiuscu-

tennularia indivisa, dredged in deep water off the coast of Ballaugh, Isle of Man, September 30, 1839.

V. RISSOA RUPESTRIS. Nov. Sp. Forbes. Plate II. fig. 13.

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lis, costatis, costis 7; aperturá angustè lanceolatá; caudá mediocri. Lon.  $0\frac{4}{10}$  unc.

The shell of this species is more attenuate than the last, and the mouth and beak longer and much narrower; seven strong ribs proceed from base to apex in the manner of those on *Pleurotoma septangularis*, to which it is nearly allied, but differs, besides form, in being spirally striated: it is nearly as strong. Its colour is dusky white, with obscure rufous spiral bands. Several specimens were dredged at the same time and place with the last.

VIII. PATELLA? ANCYLOIDES. Nov. Sp. Forbes. Plate II. fig. 16.

P. testá, tenuissimá, pellucidá, rotundatá, gibbá, albá, sub lente reticulatá, vertice versus marginem inflexo. Lon. 2 lin.

Possibly a Lottia. A shell so nearly resembling an Ancylus, that had I not dredged it, I should have looked on it as such. The apex is more incurved than in any of our other species of smaller Patellæ, and the shell much more conical. It was dredged along with the two last described species in Lamlash Bay, Arran.

XIII.—Catalogue of the Species of Reptiles collected in Cuba by W. S. MacLeay, Esq.;—with some Notes of their Habits extracted from his MS. By J. E. Gray, Esq., F.R.S.

THE Catalogue is a continuation of the former one of Mammalia from the same island, published in a former Number of this work, vol. iv. p. 1.

It is worthy of remark that all the species described in the former paper are different from any mentioned in the Fauna of Cuba now in course of publication by M. Sagra. Several of the reptiles contained in this list appear to have been also found by that naturalist; but others which have been brought home by Mr. MacLeay we have reason to think have escaped his research.

As the species of the genus Anolis are difficult to distinguish, and as there are several species in the British Museum which I cannot refer with any certainty to the species described by

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